

Remarks/Arguments

Applicants respectfully request favorable reconsideration of the subject application, particularly in view of the above amendment and the following remarks.

Applicants have amended Claim 19 to correct an obvious typographical error. Applicants respectfully urge that there is no additional fee for this amendment as the number of independent claims and the total number of claims remain unchanged.

Claims 19-23 have been objected to due to the presence of a misspelled word, "saod", in Claim 19, line 9. In response thereto, Applicants have amended Claim 19 by deleting the misspelled word and in its place inserting --said--, the correct word.

The invention claimed by Applicants is a method for rerounding out-of-round flexible plastic pipe in which the out-of-round flexible plastic pipe is placed in a pipe passage disposed between a pair of jaws of a rerounding apparatus. It will be apparent that an out-of-round, i.e. oval, pipe has both a major axis and a minor axis, the major axis being the longest axis of the oval and the minor axis being the shortest axis of the oval. The out-of-round flexible pipe is oriented within the pipe passage such that the major axis is substantially perpendicular to the jaws or, to state it another way, substantially parallel to the direction of travel of the jaws as they close around

the out-of-round pipe. The out-of-round flexible plastic pipe is compressed by reducing the distance between the jaws *until the major, or initially longest, axis becomes a minor axis*, forming a compressed flexible plastic pipe. Thereafter, the compressed flexible plastic pipe is decompressed by increasing the distance between the jaws, forming a substantially round flexible plastic pipe. *The crux of this invention is the discovery by the inventors that, in order to obtain a truly round flexible pipe from an out-of-round, i.e. oval, flexible plastic pipe, it is necessary to compress the pipe along the line of the longest axis until the pipe is round and then further compress the pipe until the longest axis becomes the shortest axis and the previously shortest axis becomes the longest axis (i.e. over-correct or over-compress the pipe) before decompressing the pipe* (Page 4, line 11 to Page 5, line 4). Applicants respectfully urge that the prior art relied upon by the Examiner for rejection of the subject application neither teaches nor suggests the requirement of over-correction in order to obtain a round flexible plastic pipe from an initial out-of-round, or oval, flexible plastic pipe as required by the method of Applicants' claimed invention.

Claims 19 and 21-23 have been rejected under 35 U.S.C. 102(b) as being anticipated by Behrens, U.S. Patent 4,583,390 (hereinafter "the Behrens patent"). This rejection is respectfully traversed. The Behrens patent teaches an

apparatus for squeezing off pipe and then rerounding the squeezed off pipe. The apparatus includes an upper rerounding fixture 150, which includes a half-rounded concave, semi-circular or half-cylinder portion 152, and a lower rerounding fixture 160, which also includes a half-rounded concave, semi-circular or half-cylinder portion 162 (Fig. 10, Col. 7, lines 20-42). Applicants respectfully urge that, not only does the Behrens patent not teach or suggest the method of the invention claimed by Applicants in which the originally out-of-round flexible plastic pipe is over-compressed beyond a point of roundness, but also, by virtue of the fact that when the two half-rounded concave, semi-circular portions 152 and 162 of the Behrens apparatus are pushed together to compress the plastic pipe, a circle is formed around the pipe, *over-compression of the plastic pipe as required by Applicants' claimed invention is not possible*. Accordingly, given the impossibility of the apparatus of the Behrens patent performing the method of the invention claimed by Applicants as discussed herein above, Applicants respectfully urge that the Behrens patent does not anticipate the invention claimed by Applicants in the manner required by 35 U.S.C. 102(b).

Claim 19 and 21-23 have been rejected under 35 U.S.C. 102(e) as being anticipated by Null et al., U.S. Patent 6,419,424 B1 (hereinafter “the Null et al. patent”). This rejection is respectfully traversed. The Null et al. patent teaches a

trailer for transporting coiled pipe and for assisting in the unwinding of the pipe for laying in a trench. The apparatus includes a rerounding element 46 as shown in Figs. 5 and 5a and as described beginning at Col. 9, line 7, which includes a pair of opposed upstanding rollers 60, 62, the distance between which is adjustable by movement of roller 62. However, the Null et al. patent neither teaches nor suggests adjusting of the distance between the rollers 60 and 62 to over-compress the out-of-round flexible plastic pipe as required by the method of Applicants' claimed invention.

The Examiner asserts that teachings of the method of Applicants' claimed invention by the Null et al. patent are evidenced by Col. 10, lines 3-21 and Figs. 5 and 5b. Applicants respectfully urge that the passage cited by the Examiner is related not to rerounding of the plastic pipe but rather to vertical deflection of the pipe by means of deflection assembly 74. Accordingly, Applicants respectfully urge that the Null et al. patent neither teaches nor suggests the method of rerounding of out-of-round plastic pipe, in particular, the over-compressing of the pipe, as claimed by Applicants and, thus, does not anticipate the invention claimed by Applicants in the manner required by 35 U.S.C. 102(e).

Claim 20 has been rejected under 35 U.S.C. 103(a) as being unpatentable over the Behrens patent as discussed herein above. This rejection is respectfully traversed. Applicants' arguments with respect to the Behrens patent as

set forth herein above in connection with the rejection of Claims 19 and 21-23 are equally applicable to this rejection and, thus, will not be repeated other than to reiterate that the Behrens patent neither teaches nor suggests over-compression in the direction of the initial major axis of an out-of-round plastic pipe in order to reround an out-of-round plastic pipe as claimed by Applicants. Claim 20 of the subject application requires over-compression of the out-of-round plastic pipe to produce a minor axis having a length in a range of about 70% to about 95% of the diameter of the flexible plastic pipe. That is, over-compression to produce a minor axis having a length within the preferred recited range will, upon decompression of the plastic pipe, result in a rerounded pipe within a reasonable amount of time. Over-compression to produce a minor axis having a length less than 70% of the diameter of the flexible plastic pipe will require a longer amount of time for the pipe to decompress to a rerounded state and may, in fact, result in a dimensionally different out-of-round plastic pipe from the initial out-of-round pipe and over-compression to produce a minor axis having a length greater than 95% of the diameter of the flexible pipe will not be sufficient over-compression to achieve the desired pipe roundness upon decompression of the pipe.

The Examiner acknowledges that the Behrens patent does not teach the claimed lengths of the minor axis, but rather argues that the length of the minor axis

is a mere obvious matter of choice dependent upon the desired final product and of little patentable consequence since it is not a manipulative step or feature of the claimed process. The Examiner further argues that the claimed length is generally well-known in the molding art. Applicants respectfully disagree. As indicated herein above, the length of the minor axis impacts the claimed method and the results achieved by the claimed method and, thus, the length of the minor axis is not a mere obvious matter of choice. Accordingly, Applicants respectfully urge that the Berhens patent does not render Applicants' claimed invention obvious in the manner required by 35 U.S.C. 103(a).

Claim 20 has been rejected under 35 U.S.C. 103(a) as being unpatentable over the Null et al. patent as discussed herein above. This rejection is respectfully traversed. Applicants' arguments with respect to the Null et al. patent as set forth herein above in connection with the rejection of Claims 19 and 21-23 are equally applicable to this rejection and, thus, will not be repeated other than to reiterate that the Null et al. patent neither teaches nor suggests over-compression of an out-of-round plastic pipe in order to reround an out-of-round plastic pipe as claimed by Applicants. The Examiner acknowledges that the Null et al. patent does not teach the claimed lengths of the minor axis, but rather argues that the length of the minor axis is a mere obvious matter of choice dependent upon the desired final

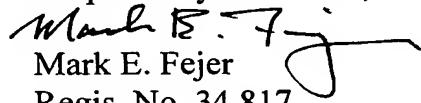
product and of little patentable consequence since it is not a manipulative step or feature of the claimed process. The Examiner further argues that the claimed length is generally well-known in the molding art. Applicants respectfully disagree. As indicated herein above, the length of the minor axis impacts the claimed method and the results achieved by the claimed method and, thus, the length of the minor axis is not a mere obvious matter of choice. Accordingly, Applicants respectfully urge that the Null et al. patent does not render Applicants' claimed invention obvious in the manner required by 35 U.S.C. 103(a).

Conclusion

Applicants intend to be fully responsive to the outstanding Office Action. If the Examiner detects any issue which the Examiner believes Applicants have not addressed in this response, Applicants urge the Examiner to contact the undersigned.

Applicants sincerely believe that this patent application is now in condition for allowance and, thus, respectfully request early allowance.

Respectfully submitted,


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